J. TISSOT
PROFESSEUR DE PHYSIOLOGIE GÉNÉRALE AU MUSÉUM
D'HISTOIRE NATURELLE

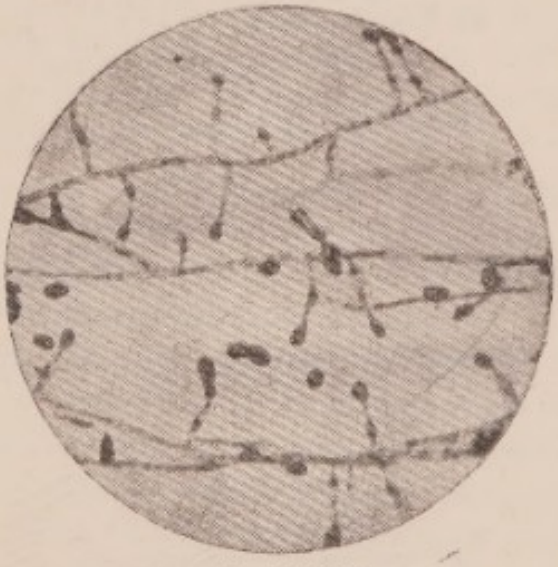
CONSTITUTION DES ORGANISMES

ANIMAUX ET VÉGÉTAUX

CAUSES DES MALADIES

QUI LES ATTEIGNENT

II (PLANCHES)



LA SYPHILIS

PARIS
AU LABORATOIRE DE PHYSIOLOGIE GÉNÉRALE DU MUSÉUM
D'HISTOIRE NATURELLE
RUE CUVIER, 7

1926

J. TISSOT
PROFESSOR OF GENERAL PHYSIOLOGY AT THE MUSEUM
OF NATURAL HISTORY

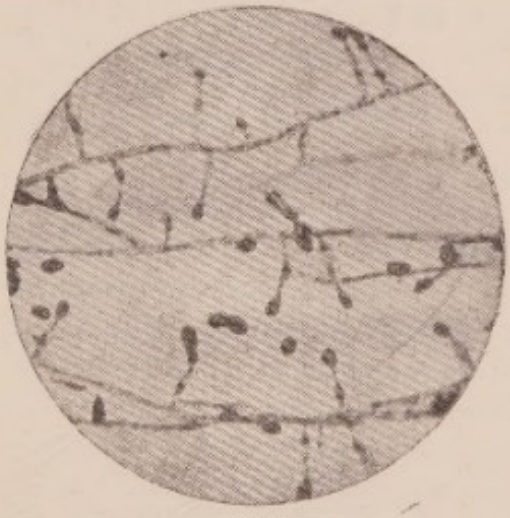
CONSTITUTION OF ORGANISMS

ANIMALS AND PLANTS

CAUSES OF DISEASES

THAT AFFECT THEM

II (PLATES)



SYPHILIS

PARIS
AT THE LABORATORY OF GENERAL PHYSIOLOGY OF THE MUSEUM
OF NATURAL HISTORY
7 RUE CUVIER

1926

EXPLANATORY TABLE OF PLATES

Plate 1. Formation of germinal masses (leukocytes) in an in vitro bacterial culture (Tetanus transformation mold, reduced to the bacterial state). FIG. 1, gr. 610: Photograph of the elements of the original culture. FIG. 2, Agr. (gr. 1220).

Pl. 2. FIG. 1, **gr. 1100**: Elements of a syphilis bacterial culture on agar on the eleventh day (drawing). FIG. 2, gr. 1100: Elements of a one-month anaerobic tetanus broth culture (drawing). FIG. 3, gr. 1100: Spore-forming hyphae in a gonococcus culture on agar on the twenty-sixth day (drawing). FIG. 4, gr. 1100(1): Mycelial elements and germinative masses of a diphtheria culture on agar on the fortieth day (drawing).

P1. 3. Elements of a tubercular sputum culture: FIG. 1, gr. 1100, in broth on the seventh day (drawing). FIG. 2, gr. 1100, in broth on the twenty-eighth day (elements of the surface veil) (drawing). - FIG. 3, gr. 1100, on agar on the seventh day (drawing).

Pl. 4. FIG. 1, gr. 245, left part; gr. 1100, right part 2: Germinal masses of a typhus bacillus culture on agar on the fourth day (drawing). FIG. 2, gr. 1100: Germinal mass of a bacterial culture on agar from the liver of a normal guinea pig. - FIG. 3: Elements of an aerobic tetanus culture on gelatin after fifteen hours, twenty-three hours, and thirty hours (Gr. 1100).

Pl. 5. Gr. 1100: Elements of a tetanus culture in the rat pleura (pleural fluid after twenty-six hours) (drawing).

Pl. 6. FIG. 1: Formation of heterogeneous leukocytes in the cerebrospinal fluid of the dog twenty-four hours after injection of a bacterial culture of the Penicilium form of the organic coffee mold. Photograph of the elements of the cerebrospinal fluid. Enlargement; gr. 1100×2=2200). - FIG. 2: Formation of identical heterogeneous leukocytes in vitro bacterial broth culture. Photograph of the culture elements (Enlargement; gr. 1100×2=2200).

Pl. 7. FIG. 1, gr. 1100: Original photograph of Figure 1, Plate 6. FIG. 2, gr. 1100: Another aspect of the same preparation.

(1) *The magnifications indicated for the drawings are approximate.*

P1. 8. Formation of germinative masses or heterogeneous leukocytes twenty-four hours after injection, into the cerebrospinal fluid of the dog, of spores of a mold of the type Mucor racemosus. Various aspects of a preparation of cerebrospinal fluid (FIG. 1, gr. 350. FIG. 2, gr. 450). FIG. 3, gr. 690: 1, germinative mass in vegetation; 2, mycelial filaments that it emits; 3, fructifications that terminate the filaments.

P1. 9. Vegetative elements of the sleeping sickness pathogen in the venous blood of the ear of a guinea pig inoculated with the Sporothricum form of the pathogenic mold. FIG. 2, gr. 100: Overall photograph of a group of two or three germ masses and the bundles of mycelial filaments they emit. FIG. 1, gr. 245: A, Group of two or three germ masses; B, C, the bundles of mycelial filaments they emit; D, mycelial filaments of the bundles; E, mycelial dilations that constitute the trypanosomes. FIG. 3, gr. 245: Formation of trypanosomes, F, by dilation of the ends of the mycelial filaments from the germ masses.

Pl. 10. - Vegetation of germ masses in in vitro bacterial cultures or in animal body fluids. FIG. 1, gr. 1100: Germ masses of a broth anthrax culture developing its mycelial filament. FIG. 2, gr. 1100: 1, 2, Germ masses of the sleeping sickness pathogen in the venous blood of a guinea pig inoculated with spores of the Sporothricum form of the pathogen; 1, a germ mass forming an almost complete trypanosome 3, and another 4, still rudimentary. FIG. 3, gr. 245: Vegetation of germ masses in the cerebrospinal fluid of a guinea pig inoculated with spores of a mold derived from a tetanus culture. FIC 4, gr. 245: Vegetation of germinal masses in a pneumonia patient's sputum. FIG. 5, gr. 1100: Development of germinal masses in breast cancer (drawing).

Pl. 11. Gr. 1100: Vegetative and fruiting elements of molds in the spleen of a normal gray mouse (drawing).

Pl. 12. FIG. 1, 2, 3, 4, gr. 245: Photographs of the vegetative and fruiting elements of molds in the spleen of a normal gray mouse.

Pl. 13. FIG. 1, 2, 3, gr. 245. FIG. 4, gr. 1100: Photographs of the vegetative and fruiting elements of molds in the spleen of the normal rat.

Pl. 14. Mold elements in the white matter of the hemispheres (FIG. 1, gr. 1100) and in the choroid plexuses of the normal rat (FIG. 2, gr. 1100). Drawings.

Pl. 15. - Mold elements in the white matter of the brain (FIG. 1, gr. 1100), in the spleen (FIG. 2, gr. 1100) of the normal cat, and in the spleen of the normal rat (FIG. 3, gr. 1100) (Drawings).

Pl. 16. - Mold elements in the white matter of the optic bodies (FIG. 1, gr. 1100), in the gray matter of the hemispheres (FIG. 2. 2, gr. 245. 1, 3, 4, 5, 6, 7, 8, gr. 1100), in the white matter of the hemispheres (FIG. 3, gr. 1100) of the normal pore and in the white matter of the hemispheres of an eight-day-old kid (FIG. 4, gr. 1100) (Drawings).

Pl. 17. Mold elements in the liver (FIG. 1, gr. 600), and the white matter of the hemispheres (FIG. 2, gr. 1100) of the normal ox (Drawings).

P1.18. Mold elements in the liver of a normal ox (FIG. 1, gr. 610. FIG. 2, gr. 245), and in the spleen of a newborn rat (FIG. 3, gr. 245) (Photographs).

Pl. 19. Mold elements in the choroid plexuses (FIG. 1), and in the white matter of the hemispheres (FIG. 2), of a dog with rabies.

FIG. 1, gr. 1100: Mycelial trunk (3), its varicose ramifications (5, 6), and the spore-bearing hyphae (7) it forms. Varicose mycelial branch (1) bearing encapsulated balls (2) with stalks.

FIG. 2: 1, 2, gr. 610: Varicose mycelial branches ending in balls (11); 3 gr. 1100 Mycelial filaments ending in ball-shaped fruiting bodies; 4, idem; gr. 1100; 5 to 12, gr. 1100; 5: Lateral chlamydospores on a mycelial filament; 6: Germinative masses appearing to belong to the rabies mold; 7, 8, 9: Various mold formations; 10: Torn germinative mass letting its contents escape; in the center, bacillary form of the rabies agent.

Pl. 20. FIG. 1 to 4, gr. 525. - FIG. 5, gr. 610: Vegetative and fruiting elements of molds in the spleen of a dog injected with anti-spleen goat serum. Various aspects of a preparation.

Pl. 21. FIG. 1 to 5, gr. 245: Rudimentary spindle-and pear-shaped fruiting forms in a rudimentary culture of the Penicilium form of the human organic mold isolated from uterine cancer. FIG. 6, gr. 245: Mycelial development of anthrax on thin-layer broth. Ball-shaped fruiting bodies.

FIG. 7, gr. 245: Ball-shaped fruiting bodies, later transforming into groups of sterigmata, of the Penicilium form isolated from the cerebrospinal fluid of patients with encephalitis lethargica.

P1. 22. Intermuscular lamellar connective tissue of beef (intergluteal). FIG. 1, gr. 1100 approximately: Diagram of the elements of connective tissue (Drawing). FIG. 2, gr. 245: Fixed cells and their mycelial branches. -FIG. 3, gr. 245: Germinal masses in formation (Mastzellen). FIG. 4, gr. 610: Mold fruiting bodies in terminal balls. FIG. 5: Basophilic germinal masses of irregular shapes.

Pl. 23. Intermuscular lamellar connective tissue of the ox. -FIG. 1, gr. 610; 1, small germinative mass; 2, formation of large germinative masses or sclerotia by grouping and fusion of small masses. FIG. 2, gr. 245: Germinative masses. FIG. 3, gr. 100: Overall view of a preparation; some sclerotia are indicated by a cross. FIG. 4, gr. 100: A large sclerotium and the connective tissue bundles it emits. FIG. 5, gr. 245: The same sclerotium and the bundles it emits; the photograph is underdeveloped to make the sclerotium and its branches very visible.

Pl. 24. Lamellar connective tissue of the ox (Figs. 1 to 4, gr. 245). - FIG. 1: Large connective (mycelial) bundle, a lateral branch, its branches and their division into elementary fibers. FIG. 2: A mycelial branch, the lateral fibers and the fruiting bodies it emits.

FIG. 3: Flat cells of the bundles, mycelial dilations of elementary fibers. FIG. 4: The same flat cells on dissociated fibers.

Pl. 25. FIG. 1 to 5, gr. 245: Mycelial dilations on branches of the Mucor racemosus form of the human organic mold.

Pl. 26. Lamellar connective tissue of beef. FIG. 1 to 6, gr. 610: Various forms of fixed cells (mycelial dilations or germinative masses) of connective tissue and the mycelial branches they emit.

Pl. 27. FIG. 1, gr. 885: Germinative masses A, B, C, D, E, of a culture of Eberth's bacillus on agar, the branched mycelial filaments (cilia) they emit and the zymo-spores developed on them. FIG. 2, gr. 610: Development of the germinative masses, A, and dilated mycelial filaments B, of a mold derived from a tetanus culture. FIG. 3, gr. 245: Lamellar connective tissue of beef. Vegetation of the small germinative masses B, C, D, E, F, G, H.

Formation of spores and zymospores on the mycelial filaments. --FIG. 4, gr. 610: Mycelial vegetative growth of the tetanus agent. Form FIG. 5, gr. 245: Mycelial vegetative growth of the scarlet fever agent.

P1. 28. Lamellar connective tissue of the ox. FIG. 1, gr. 245: Fibrillar constitution of the mycelial branches. FIG. 2, gr. 245: Spore-bearing appendages of the connective fiber branches.

Pl. 29. - Lamellar connective tissue of the ox (Fig. 1, 3, 5, 6, 8, gr. 245. FIG. 4, gr. 100). Connective tissue of the periphery of a breast cancer (FIG. 2, 7, gr. 245). -FIG. 1: Constitution of the connective bundles. FIG. 3: Fruiting bodies of the connective fibers. -FIG. 4: Germinal masses (sclerotia) of the connective tissue. FIG. 5, 6: Formation of fruiting bodies by winding of the fibers. FIG. 7: Fruiting body of Mucor racemosus on connective branches of the pericancerous area of a breast tumor. -FIG. 8: Fruiting bodies of the Monosterigmata form of connective fibers.

Pl. 30. Lamellar connective tissue of the ox. Formation of germinative masses; sclerotia (FIG. 1 to 8, gr. 245).

Pl. 31. Lamellar connective tissue of the ox (FIG. 4, gr. 245. - FIG. 1, 2, 5, 6, gr. 610. FIG. 3, gr. 1440). Spiral winding of connective tissue bundles and elementary fibers.

Pl. 31a. Formation of fat in connective tissue (FIG. 1, gr. 91). FIG. 2, gr. 245: Formation of fat cells by branched lateral branches of the connective tissue bundles. FIG. 3, 4, gr. 245: Sclerotia or fixed fat cells of connective tissue.

P1. 32. Vegetative forms of canine organic mold in vitro. - FIG. 1, gr. 610: Mold form obtained by culture and transformation of subcutaneous connective tissue. FIG. 2, gr. 245: Sterigmatocystis form obtained by culture of spinal cord pulp in vitro. FIG. 3, gr. 245: Monosterigma form obtained by culture of subcutaneous connective tissue. FIG. 4, gr. 245: Mold obtained by in vitro culture of leukocytes removed from centrifuged blood; formation of perithecia.

Pl. 33. - Gonidial forms of canine organic mold obtained by in vitro culture of fragments of lamellar connective tissue separating the gluteal muscles. (FIG. 1 to 6, gr. 245). - FIG. 1, 2: For-FIG. 4, 5: Forme Sterigmatocystis. - FIG. 3, 4: Forme Penicilium. - Fig. 5,5: Forme Acremonium alternatum.

Pl. 34. FIG. 1, 2, gr. 245: Mucor form of bovine tuberculosis cultures. FIG. 3, gr. 245: Mucor form of a cholera vibrio (Bologna vibrio). - FIG. 4, 5, gr. 245: Mucor form of human tuberculosis cultures.

Pl. 35. FIG. 1, 4, gr. 100: Mucor form of human tuberculosis cultures. FIG. 2, gr. 245: Mucor form of bovine tuberculosis cultures. FIG. 3, gr. 100: Mucor form of a cholera vibrio (Bologna vibrio).

Pl. 36. FIG. 1, gr. 1100: Forms of the mycelial branches of Mucor Truchisi (Lucet). FIG. 2, gr. 245: Form of the mycelial branches of a Mucor isolated by culture from the brain substance of a rabid dog.

Pl. 37. Gr. uniform 245. FIG. 1: Flow of basophilic protoplasm from the end of a broken filament of the Mucor form of the agent of icterohemorrhagic spirochetosis. - FIG. 2: Flow of basophilic protoplasm (myelin) from the end of a broken myelinated fiber of the rabbit sciatica. - FIG. 3, 4: Transverse septation lines of rabbit myelinated fibers; identical septation lines on mycelial branches of the Mucor form of bovine tuberculosis (FIG. 5), and of the agent of icterohemorrhagic spirochetosis (FIG. 6).

Pl. 38. FIG. 1, gr. 1100. FIG. 2 to 6, gr. 245. - FIG. 1: Mycelial branches of Mucor Truchisi (Lucet) showing incisures of the myelin fibers. FIG. 2, 3: Gonidiophore and mycelial branch of Mucor mu-cedo. - FIG. 4: Mycelial branch from an undetermined Mucor. - FIG. 5, 6: Incisures of the myelin fibers of the rabbit sciatica.

Pl. 39. Uniform gr. 245. FIG. 1: Mycelial branch of the Mucor form of human tuberculosis cultures. FIG. 2: Myelin fibers of the calf sciatica. - FIG. 3 to 6: Mycelial branches of the Mucor form of the agent of icterohemorrhagic spirochetosis.

Pl. 40. FIG. 2, gr. 610: the other figures gr. 245. Forms of the interannular constrictions in the myelinated fibers of the sciatic of the calf (FIG. 15), and of the rabbit (FIG. 1, 3, 5, 7, 9, 11, 13, 17, 19); the same interannular constrictions in mycelial branches of Mucor: Mucor Truchisi (FIG. 20), Mucor Regneri (FIG. 18), Mucor of the agent of icterohemorrhagic spirochetosis (FIG. 4, 6, 8, 10, 16), Mucor from human tuberculosis cultures (FIG. 14), Mucor obtained by culture of brain pulp from a rabid dog (FIG. 2, 21).

Pl. 41. FIGS. 1 to 5, gr. 830. FIGS. 6 to 11, gr. 245. FIGS. 1 to 5: Interannular constrictions of the mycelial branches of a form of As-pergillus repens. FIGS. 6, 7: Myelinated fibers of the rabbit sciatica. FIGS. 8 to 11: Interannular constrictions of the filaments of Mucor mucedo (FIG. 8, 9), of Mucor indeterminate (FIG. 10) and of Mucor of the agent of spirochetosis (FIG. 11).

Pl. 42. FIG. 1, 2, 4, 6, gr. 245. FIG. 3, 5, gr. 610. - Nuclei of the Schwann sheath, on the rabbit sciatica (FIG. 1, 3, 4) and on the mycelial branches of a Mucor obtained by culture of cerebral pulp of a rabid dog (FIG. 2, 6), and of a Mucor corymbifer of unknown origin (FIG. 5).

Pl. 43. Uniform gr. 245: Fructifications of myelinated fibers from the rabbit sciatica (FIG. 1, 3, 4, 5, 6), and of the mycelial branches of Mucor in vitro (FIG. 2, 7, 8). - Mucor from human tuberculosis cultures (FIG. 2), Mucor isolated from the brain of a rabid dog (FIG. 7, 8).

Pl. 44. Uniform gr. 245: Fructifications of myelinated fibers from the rabbit sciatica (FIG. 1 to 5).

Pl. 45. Uniform gr. 1100: Spiral appendages of myelinated fibers from the rabbit sciatica and their ramifications (FIG. 2, 3, 5), and of the mycelial branches of Mucor Truchisi (Lucet) (FIG. 1, 4).

Pl. 46. FIG. 1, 4, gr. 1100. FIG. 2, 3, gr. 610: Terminal (FIG. 1) and lateral (FIG. 3, 4) ramifications of the myelin fibers of the rabbit sciatica. Spiral appendages on the mycelial filaments of the Sporothricum form of the organic mold of humans in vitro (FIG. 2).

Pl. 47. FIG. 2, gr. 245. FIG. 1, 3, 4, gr. 610: Ramifications of the myelin fibers of the rabbit sciatica (FIG. 1, 3) and the mycelial branches of Mucor corymbifer of unknown origin (FIG. 2, 4).

Pl. 48. FIG. 1, 2, 3, gr. 245. FIG. 4, gr. 610. FIG. 1: Various elements of a culture of the Mucor form of bovine tuberculosis cultures. - FIG. 2: Myelinated fibers of the rabbit sciatica. - FIG. 3: Ramifications of the mycelial branches of Mucor corymbifer. FIG. 4: Mycelial dilations of a myelinated fiber of the calf sciatica.

Pl. 49. FIG. 1, 3, 4, gr. 245. FIG. 2, 5, gr. 610: Various aspects of the ramifications of the mycelial branches of Mucor in vitro: Mucor of the icterohemorrhagic spiro-

chetosis (FIG. 1, 3); Mucor from the brain of a rabid dog (FIG. 4); Mucor corymbifer (FIG. 2, 5).

Pl. 50. FIG. 2, 3, gr. 100. - FIG. 1, 6, gr. 245. - FIG. 4, gr. 610. — FIG. 5, gr.

750.- FIG. 4, D, D: Lateral ramifications of the cylinder-axis of rabbit myelin fibers. - FIG. 5, 6: Lateral ramifications of the cylinder-axis of a Mucor branch in vitro (Mucor isolated from the brain of a rabid dog). - FIG. 1, 2, 3: Ramifications of an initial mycelial branch of a Mucor culture (FIG. 3) into several branches (FIG. 2) which, themselves, ramify to form a large bundle of mycelial branches (FIG. 1).

Pl. 51. Uniform gr. 245. FIG. 1, 2, 3, 5: Branching and fibrillar constitution of the axis-cylinder of the myelinated fibers of the rabbit sciatic nerve. FIG. 4: Branching or fibrillar division of the axis-cylinder of a Mucor branch isolated from the brain of a rabid dog. FIG. 5: Mycelial branches of an undetermined Mucor; longitudinal striation.

Pl. 52. FIG. 1, gr. 245. - FIG. 2, gr. 500: Branching and fibrillar structure of the axis-cylinder of the mycelial branches of Mucor in vitro (Mucor isolated from the brain of a rabid dog).

Pl. 53. FIG. 1, 3, gr. 135. FIG. 2 and 4 to 8, gr. 175: Various forms of multipolar cells (perithecia) in the gray matter of the ox spinal cord.

Pl. 54. FIG. 1, 2, gr. 1100: Constituent elements of the cat spinal cord (Imp. silver nitrate). - FIG. 3, 4: Various forms of nerve cells (perithecia) in the gray matter of the ox spinal cord.

Pl. 55. Gr. 60: A large mycelial branch of the gray matter of the ox spinal cord and its ramifications.

Plate 56-57. Gr. 91: Constituent elements of the cat's spinal cord. Cross section (Silver nitrate print).

Plate 58. FIG. 3, gr. 610. - FIG. 1, 2, 4, 5, gr. 1100: Constitution and nature of the nerve cells (perithecia) of the gray matter of the cat's spinal cord (Silver nitrate print).

Plate 59. - FIG. 5, gr. 245. FIG. 1, 2, 3, 4, gr. 1100: Same legend as Plate 58.

Plate 60. FIG. 1 to 4, gr. 245. - FIG. 1, 2: Lateral spiral appendages and terminal spiral ramifications of the mycelial filaments of the white matter of the spinal cord of the ox (dahlia stain).—Fig. 3: Fruiting bodies of the mycelial filaments of the spinal cord of the ox (dahlia stain). — Fig. 4: Cephalosporium acremonium-like mold isolated from the cerebral substance of the hemispheres of a rabid dog.

Pl. 61, 62, 63. FIG. 1 to 5, pl. 61, gr. 245. FIG. 1, 2, 3, 4, 6, pl. 62, gr. 245. FIG. 1 to 10, pl. 63, gr. 245: Perithecia shapes identical to the cells of the nerve centers in a mold isolated by in vitro culture from the root of a hair of a patient suffering from microsporia. -FIG. 5, pl. 62, gr. 1100: Perithecia of an in vitro culture of the pathogenic mold which is the agent of malaria.

Pl. 64. FIG. 1 to 5, gr. 100. FIG. 6, gr. 245: Perithecia formed in vitro by a mold obtained by culturing and transforming the pulp of the brain matter of a newborn who died at term.

Pl. 65. FIG. 1, 2: Photograph and enlargement of figure 152 from Prenant's Treatise on Histology (appendages and varicosities of the branches emanating from the cells of the cerebral cortex of the cat). FIG. 3: Purkinje cells of the cerebellum (FIG. 152, Treatise on Histology, by Prenant).

P1..66. Enlargement of a region of figure 430 from Ramon y Cajal's Treatise on Histology of the Nervous System (horizontal and anteroposterior section of the cerebral vesicle of a urodele).

Pl. 67. - FIG. 1, 3, gr. 91: Mycelial branches of the pyramidal cells of the cortex of the cerebral hemispheres of the sheep. FIG. 2, gr. 245: Fruiting bodies of mycelial filaments of the cerebral cortex of the rabbit.

Pl. 68. FIG. 1, gr. 61: Mycelial branches of the pyramidal cells of the cortex of the cerebral hemispheres of the sheep. - FIG. 2, 3, gr. 60: A large cell of the gray matter of the corpus striatum of the sheep and the ramified mycelial branches it emits.

Pl. 69. - FIG. 1, gr. 135: Purkinje cell of the cerebellum of the sheep -FIG. 2, 3, gr. 100: Mycelial branches and encapsulated balls of cells from the cerebellar cortex of the sheep.

Pl. 70. FIG. 1, gr. 175: Mycelial branches with their attached lateral spores, in the gray matter of the spinal cord of the ox. - FIG. 2, gr. 175: Mycelial branches in the

cerebellar cortex of the sheep and the spores they form. -FIG. 3, gr. 175: Special, unknown cells and fine mycelial filaments emanating from them, in the cerebellar cortex of the sheep. -FIG. 4, gr. 60: Large mycelial branch or very long sclerotium with its mycelial branches in the cerebellar cortex of the sheep.

Pl. 71. -FIG. 1, gr. 60. -FIG. 5, gr. 175. -FIG. 2, 3, 4, gr. 245. -Fig. 1, 2, 3,: -FIG. 1, 2, 3: Encapsulated balls of the gray matter of the sheep's cerebellum. FIG. 4: Formation of spores, spiral appendages, and bunches of spiral appendages by the mycelial branches of the gray matter of the sheep's cerebellum. - FIG. 5: Large mycelial trunks and their ramifications in the gray matter of the sheep cerebellum.

Pl. 72.-FIG. 4, 5, gr. 175. FIG. 1 to 4, FIG. 6, gr. 245. FIG. 7, gr. 325. FIG. 1 to 5: Encapsulated balls of cortical gray matter from the sheep cerebellum. FIG. 6: Pear-shaped fruiting bodies of a rudimentary culture of the Penicilium form of the human organic mold. FIG. 7: Perithecium of a mold culture of the gonidial form Corymbisporium obtained by culturing a fragment of human tuberculous lung.

Pl. 73. FIG. 1, 3, 5, 6, 7, gr. 175. FIG. 4, 8, 9, gr. 245. FIG. 2, gr. 610. FIG. 1: Mass of agglomerated spores germinating in the gray matter of the ox spinal cord. -FIG. 2: Masses of agglomerated spores germinating in an in vitro culture of Mucor corymbifer. FIG. 3, 4, 5: Germinative masses of the gray matter of the sheep cerebellum. FIG. 6: Terminal spherical fructification of a mycelial branch of the gray matter of the sheep cerebellum. - FIG. 7: Ibid. Spindle formations. -FIG. 8: Round perithecia of a mold in vitro (vegetative form of Microsporum). FIG. 9: Ball- or sac-shaped fruiting bodies of a vegetative form of rat organ mold, in vitro.

Pl. 74. FIG. 1, 2, 3, gr. 245: Mold elements of the gray matter of the sheep's cere bellum. Large mycelial branches, mycelial dilations, fructifications (fruiting bodies).

Pl. 75. FIG. 1, 3, gr. 610. FIG. 2, 4, gr. 1100: End plates of the snake muscles.

Pl. 76. FIG. 1, gr. 1440. -FIG. 2, 3, gr. 1100: Composition of the sarcolemma and the motor end plates of the intercostal muscles of the rabbit.

Pl. 77. FIG. 1 to 4, gr. 1100. FIG. 5, gr. 1440: Same legend as Pl. 7.6

Pl.78.- FIG. 1, gr. 500: Dissociation of the elementary fibrils of the muscle fibers of the carp. turtle. FIG. 2, gr. 245: Idem, muscles of the FIG. 3, gr. 245: Idem,

muscles of the sheep. FIG. 4, gr. 245: Torn bundle of muscle fibers of the carp showing the striation proper to the sarcolemma.

Pl. 79. FIGS. 1 to 5, gr. 1100. FIG. 6, gr. 610: Composition of the elementary fibrils of the muscle fibers of the snake.

Pl. 80. FIG. 1, gr. 245. FIGS. 2, 5, 6, 7, gr. 610. FIG. 3, 4, gr. 1100: Composition of the muscle fibers of the snake.

Pl. 81. FIGS. 1 to 4, gr. 1100: Composition of the muscle fibers of the snake.

Pl. 82. FIGS. 1 to 8, gr. 1100: Composition of the muscle fibers of the thigh of the guinea pig fetus

Pl. 83. FIG. 1, sq. 1440. -FIG. 2 to 9, sq. 1100. -FIG. 10, 11, gr 245: Constitution of the muscles of the fetal thigh of the guinea pig.

Pl. 84. FIG. 1, 4, 5, sq. 1100.-FIG. 2, 3, sq. 610. Fig. 1, 4: Constitution and formation of the muscle fibers of the fetal guinea pig. -FIG. 5: Constitution of the muscle fibers of the rat heart.

Pl. 85. FIG. 1, 3, sq. 100. -FIG. 2, sq. 60. -FIG. 4, sq. 1100: Constitution of the muscle fibers of the rat heart.

Pl. 86. FIG. 1, 2, 4, gr. 1100. FIG. 3, gr. 245: Composition of the muscle fibers of the rat's heart.

Pl. 87. FIG. 1, 3, 4, 6, gr. 610. FIG. 2, 5, gr. 1100: Composition of the muscle fibers of the rat's heart. Sarcolemma.

Pl. 88. FIG. 1, gr. 60. FIG. 2, 4, gr. 110. Constitution of the guinea pig liver. — Mycelial branches, their ramifications and their fructifications.

Pl. 89.-FIG. 1, gr. 110. FIG. 2, gr. 245: Same legend as Pl. 88

Pl. 90.- FIG. 1 to 4, gr. 245. FIG. 1: Development of the mycelial branches and formation of hepatic cells by their ramifications.-FIG. 2, 3, 4: Groups of hepatic cells or lobules (guinea pig liver).

Pl. 91. FIG. 1, gr. 1100. FIG. 2, gr. 610. FIG. 3, 4, 5, gr. 245: Constitution of hepatic cells (guinea pig liver).

Pl. 92. Uniform gr. 1100: Constitution of hepatic cells (guinea pig liver).

Pl. 93. FIG. 1, 2, 3, gr. 100: Constitution of the sheep's spleen. Formative mycelial branches and their development.

Pl. 94. - FIG. 1 to 4, gr. 245: Constituent elements of the sheep's spleen.

Pl. 95. FIG. 1, gr. 33. FIG. 2, gr. 100. FIG. 8, gr. 245: Constitution of the guinea pig testicle. Formative mycelial branches.

Pl. 96. FIG. 1, gr. 100. FIG. 2, gr. 245: Constitution of the guinea pig testicle. Constitution of the formative mycelial branches.

Pl. 97. FIG. 1 to 5, gr. 245: Constituent elements of the guinea pig testicle.

FIG. 1, 2, gr. 245. FIG. 3, 4, gr. 610: Constituent elements of the guinea pig testicle.

Pl. 99. guinea pig. FIG. 1 to 4, gr. 610: Constituent elements of the guinea pig testicle.

Pl. 100. -FIG. 1, 2, 3, 4, gr. 1100. FIG. 5, 7, gr. 610. FIG. 6, gr. 245: Constituent elements of the guinea pig testicle. Formation of spermatozoa.

Pl. 101. FIG. 1, gr. 245. FIG. 2, 3, 5, 6, 7, gr. 610. FIG. 4, 8, gr. 1100: Constitution of the guinea pig ovary.

Pl. 102. FIG. 1, gr. 100. FIG. 2, 3, gr. 245. FIG. 4, gr. 500: Constitution of the dog's ovary. Photograph of a section of the ovary.

Pl. 103. FIG. 1, 2, 3, 5, gr. 245. FIG. 4, gr. 610: Formation of the egg in the dog's ovary. Mode of formation of the perithecia.

Plate 104. FIGS. 1 to 6, gr. 245: Stages in the formation of the egg in the ovary of the female dog.

Plate 105. FIGS. 1 to 7, gr. 245: Stages in the formation of the egg in the ovary of the female dog (continued from Plate 104).
Plate 106. FIGS. 1 to 6, gr. 1100: Ovary of the female dog. Constitution of the ovum.

Plate 107. FIGS. 1 to 9, gr. 1440. FIGS. 1 to 7: Stages in the formation of blood corpuscles in the Alligator mississipiensis. - FIGS. 8, 9: Hemolysis of blood corpuscles by carbolic fuchsin.

Plate 108. FIGS. 1 to 5, gr. 1440 -FIG. 6, 7, gr. 1100. **FIG. 1, 2, 3, 5, 6, 7:** Composition of dried guinea pig blood cells colored by dahlia. -FIG. 4: Composition of intact, living guinea pig blood cells colored by dahlia.

Pl. 109. FIG. 1 to 4, gr. 735: Composition of the sheep's spleen.

Pl. 110. sheep. FIG. 1 to 7, gr. 1100: Constituent elements of the spleen of sheep.

Pl. 111. FIG. 3, 8, 11, gr. 245: The other figures, gr. 1100: Figurative elements contained in oxalated dog blood plasma.

Pl. 112. FIG. 1, 2.5, gr. 245. FIG. 3, gr. 100.- FIG. 4, gr. 1440.-FIG. 6, 7, gr. 610: Composition of the blades of the torpedo's electrical organ.

Pl. 113. FIG. 1 to 7, gr. 245: In vitro transformation of the organic mold of the torpedo's electric organ into Aspergillus-like mold.

Pl. 114. FIG. 1, 2, 3, 4, 9, gr. 1100. FIG. 5, 6, 7, gr. 245. - FIG. 8, gr. 735: Constitution of the diastase of germinated barley. Vegetation of the ferment and stages of its evolution in broth.

Pl. 115. FIG. 1 to 4, gr. 1100. FIG. 5, 7, 8, 9, gr. 245. - FIG. 6, gr. 175: Constitution of pork pepsin. Vegetation of the ferment in broth and stages of its evolution.

Pl. 116. FIG. 4, gr. 1440, all other figures gr. 1100. - FIG. 1: Constitution of tetanus toxin. Zymospores. - FIG. 2: Evolution of tetanus toxin and its transformation in bacillary culture.- FIG. 3: Constitution of diphtheria toxin. Zymospores. FIG. 4 to 9: Evolution of the elements of diphtheria toxin and stages of their transformation in bacillary culture. - FIG. 10, 11: Origin of the zymospores of the toxin; elements of a diphtheria culture in a pure glucose solution.

Plate 117. FIG. 1, 2, gr. 245. FIG. 3, gr. 610. FIG. 4, gr. 1100: Composition of the flakes that form in fibrinogen solutions of horse blood.

Plate 118. FIG. 1 to 7, gr. 610: Same legend as plate 117 (fibrinogen solution in the process of coagulation).

Plate 119. FIG. 1, 2, gr. 245. Plate 117. FIG. 3, 4, gr. 100: Same legend as Plate 117.

Plate 120. -FIG. 1, gr. 245. -FIG. 2, 3, 4, gr. 610. -FIG. 5 to 9, gr 1100.- FIGS. 1 to 4: Colonies of spores growing in a solution of purified fibrinogen, spontaneously coagulated. FIGS. 5 to 9: Constituent elements of a guinea pig blood clot crushed between two glass slides and stained with dahlia.

Pl. 121. FIG. 1, 2, 3, gr. 1440: Disorganization and evolution of guinea pig blood cells in the presence of rabbit complement and the precipitate of globulins from a rabbit anti-guinea pig red blood cell serum. -FIG. 4, gr. 1100: Elements of the guinea pig blood clot crushed between two glass slides and stained with dahlia. -FIG. 5, 6, gr. 1100: Bacterial elements from the broth culture of the elements contained in the leukocyte layer of oxalated and centrifuged horse blood.

Pl. 122. -Photographs demonstrating the existence of agglutinating hyaline matter (bacterial fibrin) deposited on the bacterial elements and determining their adhesion in clusters.

Agglutination, FIG. 1, 2, gr. 1100: Elements of a broth culture of the Penicilium form of rennet reduced to the bacterial state; the hyaline matter constitutes the faded spots. FIG. 4: Diagram of the clusters showing the position of the bacterial elements in the clusters; the voids separating them are occupied by the agglutinating hyaline matter. -FIG. 3, gr. 1100: Bacterial culture of lettuce organic mold showing the presence of agglutinating hyaline matter in the bacterial clusters.

Precipitation, FIG. 5, gr. 1100: Formation of a flake (mycelial colony) in horse serum supplemented with precipitating dog serum. FIG. 6: *Idem:* flake consisting of a cluster of germinating spores, whose mycelial filaments form zymospores.

Pl. 123. FIG. 1, 2, 3, gr. 245. FIG. 1: Thin cross-section of the leek leaf (col. dahlia). -FIG. 2, 3: Thick sections of the leek leaf (impregnation with silver nitrate).

Pl. 124.- FIG. 1, 2, gr. 245: Cross-sections of the leek leaf.

Pl. 125. FIG. 1 to 6, gr. 245. FIG. 2, 3, 4, gr. 91. - FIG. 5, gr. 1100. FIG. 1: Mycelial branch of the parenchyma dissociated from the onion bud scale. - FIG. 2 to 6: Elements of the dissociated parenchyma of the leek leaf.

Pl. 126. -FIG. 1, gr. 1100. -FIG. 2, gr. 610. -FIG. 3, gr. 245: Constituent elements of the leek leaf.

Pl. 127. -FIG. 1, gr. 1100. -FIG. 2, 3, gr. 610: Elements of the leek leaf. Cross-section of the leaf impregnated with silver nitrate.

Pl. 128. FIG. 1 to 4, gr. 245. -FIG. 5 to 8, gr. 610: Elements of the leek leaf.

Pl. 129. FIG. 1, 2, gr. 610. FIG. 3, gr. 1100: Constituent elements of the leek leaf. -FIG. 1, 2: Cross-section of the leaf impregnated with silver nitrate.

Pl. 130. FIG. 1, gr. 245. FIG. 2, gr. 91. FIG. 1: Cross-section of the leek leaf impregnated with silver nitrate. FIG. 2: Cross-section of the onion bulb scale (colored by the dahlia).

Pl. 131. FIG. 1, 2, gr. 245. FIG. 3, 4, gr. 91. FIG. 1: Cross-section of the onion bulb scale impregnated with silver nitrate. FIG. 2: Longitudinal section of the onion bulb scale impregnated with silver nitrate. -FIG. 3, 4: Torn edges of a cross-section of the onion bulb scale colored by the dahlia.

Pl. 132. FIG. 1, 2, 3, gr. 245: Photographs of a transverse section of the onion bulb scale, in the regions of the libero-ligneous bundles (Impregnated with silver nitrate).

Pl. 133. FIG. 1, 2, 3: Constitution of the carrot root parenchyma.

Pl. 134. 9, 10, 12, gr. FIG. 1, 3, 4, gr. 610. - FIG. 2, 6, 7, 11, gr. 245. - FIG. 5, 8, 1100: Constituent elements of the carrot parenchyma

Pl. 135. FIG. 1, 2, 3, 4, 7, gr. 245. FIG. 5, gr. 100. - FIG. 6, gr. 610: Constituent elements of the parenchyma of an apple.

Pl. 136. FIG. 1, 3, gr. 245. - FIG. 2, 4, 5, gr. 490: Constituent elements of the leaf of Althea officinalis.

Pl. 137. FIG. 1, 2, 3, gr. 245: Constitution of the parenchyma of the leaf of *Althea officinalis.* - FIG. 4: *Stromatinia cydonia* (Fig. 1, 2, page 259, Delacroix and Maublanc, *Parasitic Diseases of Cultivated Plants*).

Pl. 138. Roots of FIGS. 1 to 6, gr. 245: Composition of the root and root hairs of germinated wheat.

Pl. 139. FIGS. 1 to 8, gr. 245: Composition of the parenchyma of the stem of hymenomycete fungi. *Collybia velutipes.*

Pl. 140. FIGS. 1 to 8, gr. 245: Evolutionary forms of the fruiting bodies of a mold from the *Aspergillus* type to the *Penicilium aspergilloide* type.

Pl. 141. -Main stable gonidial forms of molds. -FIG. 1: Forme *Penicilium*. -FIG. 2: Forme *Citromyces.* -FIG. 3: Forme *Aspergillus.* -FIG. 4: *Sterigmatocystis* form. FIG. 5: Forme *Mucor corymbifer.* -FIG. 6: Forme *Sporothricum.* -FIG. 7: Forme *Verticilium*. -FIG. 8: Forme *Fusarium*. -FIG. 9: *Fusophragmium* form. -FIG. 10: *Alternaria* form. -FIG. 11: Forme *Fusophragmium of A-chorion Gypseum*. -FIG.12: *Monosterigmata* form. FIG. 13: Forme evolved *Monosterigmata*. -FIG. 14: Forme *Passalora*. -FIG. 15: Form *Peronospora or Botrytis cinerea (Bremia lactucae)*. FIG. 16: *Cladosporium or Monilia* form. -FIG. 17: Form *Acremonium alternatum*. -FIG. 18: *Spicaria* form.

Pl. 142. FIG. 1 to 4, gr. 175. FIG. 1, 2, 3: Constitution of starch grains in potatoes. FIG. 4: Formation of starch grains by the mycelial filaments of a Fusarium solani culture.

Pl. 143. FIG. 1, 2, 3, gr. 245: Fusarium solani. -FIG. 4, gr. 175: Formation of a perithecia (starch grain) by mycelial filaments of Fusarium solani. FIG. 5, gr. 245: Constitution of starch grains in the potato parenchyma.

Pl. 144. FIG. 1, 2, gr. 245: Mode of formation of starch grains (perithecia) in the potato parenchyma.

Pl.145. -FIG. 2, 9, 10, gr. 610. FIG. 1, 3, 4, 5, 6, 7, 8, 11, 12, gr. 1100: Spontaneous transformation of the organized mold of the parenchyma of the potato tuber into bacterial culture. -FIG. 1, 2: Bacterial elements of the spontaneous wet rot of tubers in the ground. -FIG. 3, 4, 5: Bacterial elements of the rot of the frozen potato. -FIG. 6, 7: Bacterial elements of the rot of the potato heated for one or two hours at 550, -FIG. 8: Bacterial elements of the broth culture of the pulp of the healthy fruit of the potato. -FIG. 9 to 12: Culture of Fusarium solani in liquefaction and passing to the bacterial state.

Pl. 146. FIG. 1 to 10, gr. 245: Gonidial forms of potato organic mold developed by transformation of the healthy tuber parenchyma. FIG. 1 to 3: Phytophtora infestans form. -FIG. 4, 5: Verticilium special form. FIG. 6: Acremonium alternatum and

Cephalosporium acremonium form. -FIG. 7. Spicaria form. -FIG. 8, 9, 10: Fusophragmium form.

Pl. 147. -FIGS. 1 to 10, gr. 245. -FIGS. 1 to 6: Mycelium and gonidia of one of the forms of Phytophtora infestans developing on brown rot of the potato. -FIGS. 7 to 10: Fusarium solani evolving into another gonidial form (Ovularia).

Pl. 148. -FIGS. 1 to 7, -FIG. 9, gr. 245. -FIG. 10, gr. 610. -FIG. 1 to 5: Evolution of the form Fusarium solani into the form Penicilium solani. FIGS. 6, 7, 8: Form Spicaria verticillata solani. FIG. 9: Form Acremonium alternatum solani.

Pl. 149. -FIGS. 1 to 6, gr. 245. -FIGS. 7, 8, gr. 610.- FIGS. 1 to 3: Form of Phytophtora infestans changing to the Mucor solani type. FIGS. 4, 5: Mucor solani. -FIGS. 6, 7, 8: Phytophtora infestans obtained by transformation of normal organic potato mold (passage through the guinea pig).

Pl. 150. -FIGS. 1, 3, 4, 6, gr. 245. -FIGS. 2, 5, gr. 100: Identity of Plasmopara viticola (FIG. 3), and Botrytis cinerea of grapes (FIG. 1, 2, 4), Neighboring fruiting bodies, in the same microscopic field, of a culture of Botrytis cinerea. Transformation of Botrytis into Penicilium (Fig. 6, 7).

Pl. 151. FIGS. 1 to 10, gr. 245: Fructifications of Bremia lactucae and its transition to other gonidian forms.

Pl. 152. FIGS. 1, 2, 6, gr. 245. FIGS. 3, 4, 5, gr. 135: Teliospores of Puccinia Malvacearum and their origin.

Pl. 153. FIGS. 1 to 8, gr. 245: Constituent elements of the parenchyma of the normal, healthy leaf of Althea officinalis. Terminal ramifications of the mycelial branches of the libero-ligneous bundles, in the parenchyma itself, in the form of gonidiophores of Botrytis cinerea.

Pl. 154. - FIG. 1 to 6, gr. 245: Sporothricum and Fusophrag-mium forms obtained by in vitro culture on agar of the teliospores of Puccinia Malvacearum.

Pl. 155. -FIG. 1, 3, 6 to 10, gr. 245. -FIG. 2, 4, 5, gr. 610. -FIG. 1 to 6: Gonidian forms of organic mold of wheat,-FIG. 1: Complex form Monilia, Acremonium and Sporothricum. -FIG. 2: Fusarium tritici. -FIG. 3, 4: Sclerospora form (Peronospora). - FIG. 5: Mycelial filament of the Sclerospora form bearing a Peronospora gonidia

and a bilocular Fusarium gonidia. -FIG. 6: Mycelial filaments of the Sclerospora form forming stylospores and sporidia identical to those that develop by germination of Tilletia tritici spores. -FIG. 7: Alternaria form. FIG. 8, 9: Normal parenchyma of the young wheat leaf. Normal cells of the uredo-spore and teliospore forms of Puccinia glumarum.

Pl. 156. FIG. 1, gr. 245. FIG. 2 to 10, gr. 610. FIG. 1: Constituent elements of a carious wheat grain (spores of Tilletia tritici). -FIGS. 2 to 10: Gonidian forms obtained by culture of the spores of Tilletia tritici. -FIGS. 2 to 7: Fusophragmium form, with two-celled gonidia (teleutospores), stylospores, etc. -FIGS. 8 to 10: Penicilium form.

Pl. 157.-FIGS. 1, 3, gr. 245. -FIGS. 2, 4, gr. 610: Constitutive elements of the parenchyma of the young Mars leaf

Pl. 158. FIGS. 1 to 10, gr. 245: Puccinia Maydis. -FIGS. 1, 2: teliospores of the sori. - FIGS. 3 to 5: Elements of a uredo. - FIGS. 6 to 9: Sporothricum form contained in the uredos. FIG. 10: Spores of smut growing on the leaves.

Pl. 159. -FIG. 1, 2, 6, 7, 9, 10, 11, gr. 610. -FIGS. 3, 4, 5, 8, 13, 14, 15, gr. 245.-FIG. 12, gr. 33. -FIGS. 1 to 7: Gonidian forms obtained by culturing the spores of a smut gall of corn. -FIG. 12: Fusophragmium form (?). - FIG. 4: Sporothricum form.-FIG. 3, 5: Cephalosporium acremonium form. — FIG. 6, 7: Penicilium form. - FIG. 8 to 15: Gonidian forms of organic corn mold obtained by culture of healthy stem tissue. - FIG. 1: Complicated form Monilia, Acremonium, Sporothricum. -FIG. 9 to 11: Penicilium form. -FIG. 12, 13: Mucor corymbifer form. -FIG. 14, 15: Fusarium form.

Pl. 160.-FIGS. 1 to 5, gr. 245.-FIG. 6, gr. 100.-FIGS. 7 to 10, gr. 610: Oat smut. -FIG. 1: Monosterigma gonidial form of oat smut growing on grains. -FIGS. 2, 3: The same Monosterigma form obtained by passage of smut spores through the guinea pig's body.- FIGS. 4, 5: Smut spores growing on oat ears.-FIGS. 6 to 9: Aspergillus fumigatus forms(FIG. 6) and Penicilium, obtained by passage of oat smut spores through the guinea pig's body.

Pl. 161.-FIG. 1, gr. 175.-FIG. 2 to 8, gr. 245.-FIG. 9, gr. 100.-FIG. 10 to 13, gr. 610. -FIG. 1: Mycelium of the gonidial form Monosterigmata vegetating along the hairs of the glumes. -1, FIG. 2: Vegetation of the same form on the glumes.

-FIG. 5: Cladosporium forms or Monilia and Mucor form (FIG. 8, 9) obtained by direct culture of anthrax spores on agar. -FIG. 3, 4: Monosterigmata form. - FIG. 6, 7: Rudimentary Penicilium form. -FIG. 10 to 13: Perfect Penicilium form obtained by culturing the organs of the guinea pig inoculated with anthrax spores.

Pl. 162. FIG. 1, 2, 4, 5, 6, gr. 245. FIG. 3, gr. 610: Penicillium form obtained by direct transformation of a human tuberculosis culture in vitro.

Pl. 163. FIG. 1, 2, gr. 100. FIG. 2, 4, gr. 245. FIG. 5, gr. 610: Mucor racemosus (FIG. 1, 2, 3), and Sterigmatocystis (FIG. 4, 5) forms obtained by direct transformation of a human tuberculosis culture in vitro (Source: Pasteur Institute).

Pl. 164. FIG. 1 to 16, gr. 610: Different types of the Penicillium form obtained by direct transformation of a human tuberculosis culture (Source: Pasteur Institute).

Pl. 165.-FIG. 1 to 16, gr. 610: Same legend as Pl. 164 (continued).

Pl. 166. FIG. 1 to 16, gr. 610: Different types of the Penicillium form obtained by transformation of a culture of human tuberculosis (Culture Ay. Origine, Küss).

Pl. 167. FIG. 1 to 15, gr. 610: Same legend as Pl. 166 (Lacr. culture, Origin: Kuss).

Pl. 168. -FIG. 1, gr. 245. FIG. 2, 3, gr. 610: Different types of the Penicilium form obtained by direct transformation of a bovine tuberculosis culture (Origin: Vallée).

Pl. 169. - FIG. 1, 2, 3, gr. 245. FIG. 4, 5, 6, gr. 100: As-pergillus (FIG. 1), Monosterigmata (FIG. 2) and Mucor (FIG. 3 to 6) forms obtained by indirect transformation of a bovine tuberculosis culture (Origin: Vallée).

Pl. 170.- FIGS. 1 to 22, gr. 610: Different types of the Penicilium form obtained by direct transformation of a bovine tuberculosis culture (Origin: Vallée).

Pl. 171.-FIGS. 1 to 14, gr. 610: Same legend as Pl. 170 (continued) (Origin: Vallée).

Pl. 172. FIG. 1, 2, gr. 610. FIG. 3, 4, 5, gr. 245. - FIG. 1, 2: Penicilium form obtained by direct transformation of a culture of avian tuberculosis (Origin: Pasteur Institute). - FIG. 3, 4: Aspergillus form. - FIG. 5: Monosterigmata form, obtained by indirect transformation of the same culture (passage through the guinea pig).

Pl. 173. - FIG. 3 to 7, gr. 610. - FIG. 1, 2, FIG. 8 to 16, gr. 245.: Different goni dial forms obtained by culture of lung tissue and the caseous material of human tubercles. FIG. 1: Penicilium. -FIG. 2 to 6: Citromyces. FIG. 7, 8: Acaulium. -FIG. 9, 10: Aspergilus minimus. - FIG. 11, 12: Sterigmatocystis. -FIG. 13, 14: Mono-sterigmatis. - FIG.15,16: Cephalosporium acremonium or Acremonium alternatum.

Pl. 174. FIG. 1 to 16, gr. 610: Different types of the Penicillium form of the human organic mold (dead newborn). FIG. 8 and 11 to 16: Types obtained from the pulp of the liver; the other types from the pulp of lung tissue.

Plate 175. Continuation of Plate 174. FIGS. 1, 5, 8, 18, 15, 19, 20: Types obtained from the liver pulp; the other types from the lung pulp (uniform Gr. 610).

Plate 176.-FIGS. 1 to 7, Gr. 610.-FIGS. 8 to 12, Gr. 245: Different gonidial forms of the organic mold of man (newborn dead at term). Citromyces form obtained from the cerebral pulp of a newborn (FIG. 1, 2), and from the pulp of the lung tissue (FIG. 3 to 7) of another newborn. FIG. 8: Sterigmatocystis form obtained from the lung pulp. FIG. 9, 11, 12: Sporothricum form obtained from the cerebral pulp of a newborn (FIG. 9), the lung tissue of a second newborn (FIG. 11), and the cerebral pulp of a third (FIG. 12). FIG. 10: Little-developed Aspergillus form obtained from the lung pulp of a newborn.

Pl. 177. FIG. 1 to 16, gr. 610: Different types of the Penicilium form of the organic mold of beef. FIG. 1, 2, 3, 5, 15: Types obtained from the liver pulp, the other types from the lung pulp.

Pl. 178. FIGS. 1 to 12, gr. 610. FIGS. 13, 14, 15, 16, gr. 100. - FIGS. 1 to 2: Different types of the Penicilium form of the organic mold of beef. FIGS. 13, 14: Mucor form. FIGS. 15, 16: Rhizopus form of the organic mold of beef.

Pl. 179. FIGS. 1 to 6, gr. 1100: Constituent elements of the veil (germinal masses or leukocytes) of two broth cultures (FIG. 1 to 3, culture no. 1; FIGS. 4 to 6, culture no. 2) obtained by spontaneous transformation of the lung tissue of two newborns cultivated on agar and transferred to broth (20-day culture).

Pl. 180. FIG. 1 to 8, gr. 1100: Constituent elements of the veil of a broth culture obtained by subculturing the culture of the newborn's lung tissue on agar. Elements of the veil after ten hours (FIG. 1, 2, 3) and thirteen hours (FIG. 4, 5, 6). - FIG. 7:

Bacterial culture of breast cancer, containing the bacillary form growing in the cancerous tissue itself. Formation of a germinative mass and a large mycelial branch by germination. - FIG. 8: In vitro transformation into germinative masses of the caseous matter extracted from a tubercle of the human lung. Elements of a three-day broth culture, obtained by subculturing the veil whose elements are represented in Pl. 181.

Pl. 181.-FIG. 1 to 5, gr. 1100: Constituent elements of the veil of a forty-five-day broth culture obtained by transformation of the caseous matter of a tubercle of the human lung.

Pl. 181. FIG. 1 to 5, gr. 1100: Constituent elements of the veil of a forty-five-day broth culture obtained by transformation of the caseous matter of a tubercle of the human lung.

Pl. 182. FIG. 1, gr. 175. FIG. 2, gr. 245. FIG. 3, 4, gr. 1100. -FIG. 1: Mycelial vegetation in a caseous tubercle. -FIG. 2: Elements of the lung tissue bordering a cavern. - FIG. 3, 4: Transformation of a normal veil of a human tuberculosis culture, by culture at 200, in non-glycerinated broth. Elements of the newly formed veil and transformation of the culture into the Monosterigmata gonidial form

Pl. 183. FIG. 1, 2, 6, 7, 8, 9, gr. 1100. - FIG. 3, 4, 5, gr. 610. -FIG. 1 to 5: Composition of the caseous matter of the tubercles of the human lung; germinative masses and mycelial filaments they emit. FIG. 9: Germination of the spores of the caseous matter and formation of zymospores by the mycelial filaments they emit. -FIG. 6, 7, 8: Germinative masses and their mycelial branches in a culture of tuberculosis on potato.

Pl. 184. FIG. 1, gr. 650.- FIG. 2, gr. 245. FIG. 3, gr. 610: Constituent elements of cancerous tissue (uterine cancer no. 1) (FIG. 1: Drawing. - FIG. 2, 3: Photographs).

Pl. 185. FIG. 1, gr. 650 to 700 (drawing). - FIG. 2, 3, gr. 610 (Photograph): Same caption as Pl. 184 (continued).

Pl. 186. FIG. 1, gr. 245. FIG. 2, 3, gr. 610: Constituent elements of cancerous tissue (uterine cancer no. 1).

Pl. 187.-FIG. 1, 2, 3, gr. 245. FIG. 4, 5, 6, gr. 610. FIG. 1: Constituent elements of cancerous tissue (uterine cancer no. 1). - FIG. 2 to 6: Sterigmatocystis form mold obtained by in vitro culture of cancerous tissue (uterine cancer no. 1).

Pl. 188. FIG. 1, gr. 650 (except sclerotium no. 1, gr. 235). - FIG. 1: Constituent elements of cancerous tissue (uterine cancer no. 2). - FIG. 2 to 6, gr. 610: Penicilium form obtained by culturing cancerous tissue.

Pl. 189. FIG. 1 to 9, gr. 610: Molds obtained by culturing cancerous tissue (uterine cancer no. 3). FIG. 1 to 3: Sporothricum form and its evolution to the Penicilium form. FIG. 4 to 9: Penicilium form.

Pl. 190. FIG. 1, gr. 130. FIG. 2, gr. 650: Constituent elements of cancerous tissue (breast cancer no. 1).

Pl. 191. FIG. 1, gr. 690. FIG. 2, gr. 245. -FIG. 1: Constituent elements of cancerous tissue (breast cancer, no. 1). - FIG. 2: Sporothricum form mold obtained by in vitro culture of cancerous tissue.

Plate 192. Continuation of plate no. 191. - FIG. 1, 2, 4, gr. 245. - FIG. 3, gr. 610. - FIG. 1, 2, 3: Penicilium rigmate form (gray mold) of vegetating syphilis FIG. 4: Monostea form in breast cancer.

Plate 193. FIG. 1, gr. 655. FIG. 2, gr. 53. -FIG. 3, 4, gr. 245.-FIG. 3, 4: Constituent elements of cancerous tissue (breast cancer no. 2). - FIG. 4, 5: Mold of the Acremonium alternatum form obtained by in vitro culture of cancerous tissue.

Plate 194. -FIG. 1 (drawing), approximate gr. 700. -FIG. 2 to 6, gr. 610. -FIG. 1: Constituent elements of cancerous tissue (breast cancer no. 3). - FIG. 2 to 6: Penicilium mold obtained by in vitro culture of cancerous tissue.

Plate 195. -Drawing, approximate gr. 700: Constituent elements of cancerous tissue (breast cancer no. 4).

Plate 196. Continuation of plate 195 (breast cancer no. 4). - FIG. 1, gr. 235: Elements of cancerous tissue. - FIG. 2 to 7, gr. 610: Penicilium mold obtained by in vitro culture of cancerous tissue.

Pl. 197. FIG. 1 to 4, gr. 245: Mold presenting the double type Sterigmatocystis and Aspergillus, obtained by culture of cancerous tissue (breast cancer no. 5).

Pl. 198. FIG. 1, gr. 245. FIG. 2, 3, gr. 610. - FIG. 4 to 11, gr. 610.- FIG. 1 to 3: Penicilium form obtained by in vitro culture of breast cancer No. 6. FIG. 4 to 11: Penicilium form obtained by in vitro culture of breast cancer tissue No. 7.

Pl. 199. FIG. 1, 2, 3, 4, 7, gr. 610. FIG. 5, 6, gr. 245. FIG. 1, 2: Penicilium form obtained by in vitro culture of breast cancer tissue No. 8. FIG. 3, 4, 5: Penicilium form obtained by in vitro culture of breast cancer tissue No. 9. -FIG. 6: Sporothricum form obtained by in vitro culture of cancerous tissue from a recurrent tumor of the larynx region. -FIG. 7: Monosterigmata form obtained by in vitro culture of breast cancer tissue No. 10.

Pl. 200. FIG. 1 to 7, gr. 1100: Transformation of normal elements of the tissue of the newborn's spleen into elements characteristic of cancerous tissue. Constituent elements of the veil of a twenty-five-day broth culture, obtained by transfer of a culture of the newborn's spleen onto agar.

Pl. 201.- Pneumonia. - FIGS. 1 to 5, gr. 245: Elements of human organic mold growing in the sputum of a pneumonia patient.

Pl. 202. FIGS. 1, 2, 4, gr. 245. FIGS. 3, 5, gr. 610: Penicillium form obtained by culture on agar of pneumonia patient's sputum.

Pl. 203.- Bacterium coli (FIG. 1, gr. 630. FIG. 2, 7, 8, gr. 610. -FIG. 3: gr. 1130. FIG. 4, 5, 6, gr. 245). -FIG. 1, 2: Citromyces form of bacterial cultures of Bacterium coli. FIG. 3: Bacterial elements (Bacterium coli) formed in the culture of Citromyces. FIG. 4 to 8: Penicilium form of bacterial cultures of Bacterium coli.

Pl. 204. - Actinomycosis (Nocardia bovis) (FIG. 1, gr. 830. - FIG. 2, gr. 245. FIG. 3, gr. 610). Mycelium and its fruiting bodies constituting the veil of a broth culture. FIG. 2, 3: Penicilium form in agar culture.

Pl. 205. Septic vibrio (FIG. 1, gr. 135. FIG. 2, gr. 830. FIG. 3, 4, gr. 245. FIG. 5, gr. 610). - FIG. 1, 2: Corymbisporium form of the septic vibrio. - FIG. 3, 4, 5: Penicilium form.

Pl. 206. - Tetanus, chickenpox, typhoid fever and corn (FIG. 1 to 5, gr. 610.FIG. 6 to 13, gr. 1100. FIG. 1 to 5: Peronospora form of the tetanus mold. - FIG. 6: Bacterial form obtained by transformation of the tetanus toxin upon contact with air. - FIG. 7 to 10: Elements of bacterial cultures of the chickenpox pathogen (7, ten-day broth culture; 8, three-day culture; 9, 10, ten-day culture). - FIG. 11, 12: Twenty-four-hour bacterial culture obtained by transformation of the leaf parenchyma of sown corn FIG. 13: Transformation form of the typhus bacillus in broth. cultivated in broth (elements of the veil, tenth day).

Pl. 207. Tetanus (FIG. 1, 2, 6, 9, gr. 610. FIG. 3, 4, 5, 7, 8, 9, gr. 245). - FIG. 1, 2: Corymbisporium form of the tetanus mold. - FIG. 3, 4: Sterigmatocystis form. FIG. 5 to 9: Penicilium form.

Pl. 208. Spontaneous tetanus in humans (FIG. 1, gr. 1100. FIGS. 2, 3, 9, 10, gr. 610. FIGS. 4 to 8, gr. 245). - FIG. 1: Elements of the tetanus mold growing in the blood. FIG. 2: Mold obtained by transformation of a broth culture. -FIG. 3 to 6: Evolution of the veil of a broth culture towards the Aspergillus form. -FIG. 7 to 10: Penicilium form.

Pl. 209. Spontaneous tetanus (continuation of plate 208). FIG. 1, 2, 6, 7, gr. 245. - FIG. 3, gr. 610. FIG. 4, 5, gr. 33). Mold obtained by indirect transformation of the gonidial forms of tetanus. -FIG. 1, 2, 3: Penicilium form. FIG. 4, 5: Mucor form. FIG. 6, 7: Penicilium form.

Pl. 210. - Leprosy (FIG. 1, gr. 245.-FIG. 2, 3, 4, gr. 610). - FIG. 1:. Mycelial vegetation constituting a leproma. - FIG. 2, 3, 4: Penicilium form obtained by in vitro culture of leproma tissue.

Pl. 211. Glanders (FIG. 1, 3 to 7, gr. 610: Penicilium form of B. mallei. - FIG. 2, gr. 245: Aspergillus form.

Pl. 212.- Diphtheria (Fig. 1, 2, 3, 6, 7, gr. 245. FIG. 4, 8, gr. 610. - FIG. 5, gr. 535). - FIG. 1 to 5: Citromyces form of a diphtheria bacillus culture. FIG. 6, 7, 8: Citromyces form obtained by culture of false diphtheria membrane (no. 6) on agar.

Pl. 213. Diphtheria. - FIG. 1, 5, gr. 610. FIG. 2, 3, 4, gr. 245: Penicilium (FIG. 1) and Monosterigmata (FIG. 2) forms obtained by culture of false membrane (no. 8)

on agar. - FIG. 3, 4, 5: Penicilium form obtained by culture of false membrane (no. 7) on agar.

Pl. 214. Diphtheria. FIGS. 2 to 11, gr. 610. FIG. 1, gr. 245. -FIG. 1, 2, 4, 6, 7, 8, FIG. 11, lower half: Penicilium form obtained by culture of false membrane (no. 3) on agar. -FIG. 11, upper half: Penicilium form from a broth culture of diphtheria.

Pl. 215. -Diphtheria. - FIGS. 1 to 10, gr. 610. -FIG. 11, 12, gr. 245. Gonidial forms obtained by indirect transformation of the diphtheria toxin. FIG. 1 to 10: Penicilium form. -FIG. 11, 12: Monosterigmata form.

Pl. 216. Penicilium form of organic wheat mold. - FIGS. 1 to 8, gr. 610. - FIGS. 9, 10, gr. 245. - Penicilium form obtained by transformation of spores of decayed wheat grain (FIG. 1 to 7), or culture of pounded wheat leaves (FIG. 8, 9, 10).

Pl. 217. Penicilium form of the organic mold of wheat (FIG. 1 to 17, gr. 610), obtained by indirect transformation (passage through a guinea pig) of the spores of a decayed wheat grain (FIG. 1, 3, 4, 5, 6, 10, 11, 14), or of the pulp of the parenchyma of young wheat leaves (FIG. 2, 7, 8, 9, 12, 13, 15, 16, 17).

Pl. 218. Penicilium form of the organic mold of barley (FIG. 1 to 13, gr. 610) obtained directly by culturing the pulp of young, pounded barley leaves (FIG. 1, 3, 4, 5, 6, 8) or indirectly by transforming the spores of Ustilago hordei (passage through the guinea pig, FIG. 2, 7, 9 to 13).

Pl. 219. Penicilium form of the organic mold of rye (FIG. 1 to 17, gr. 610), obtained directly by culturing crushed rye grains.

Pl. 220.-FIG. 1 to 11, gr. 1100. — FIG. 1 to 6: Elements of bacterial cultures of organic wheat mold obtained by culturing the spores of Tilletia tritici (FIG. 1, 3, 5, 6) or the pulp of young wheat leaves (FIG. 2, 4). FIG. 7 to 11: Elements of a culture of diphtheria bacillus in broth.

Pl. 221. FIG. 1 to 12, gr. 1100.- FIG. 1 to 4: Elements of bacterial cultures of organic mold of rye (one, three, four, seventeen days) (culture of crushed rye grains). - FIG. 5 to 10: Elements of bacterial cultures of organic mold of barley (culture of crushed leaf pulp) (FIG. 9, 10, twenty-four hours, FIG. 5, 6, 7, two days. FIG. 8, ten days). - FIG. 11, 12: Bacterial elements of a diastase broth culture of germinated barley (one day and four days).

Pl. 222. Paratyphus B. FIG. 1 to 17, gr. 610: Penicilium form of cultures of paratyphus bacillus B, obtained by passage through the guinea pig.

Pl. 223. Typhoid fever. FIG. 1, gr. 1130. FIG. 2, gr. 1100. -FIG. 3, gr. 1160.- FIG. 4, gr. 245. FIG. 5, 6, gr. 610.- FIG. 1: Eberth's bacilli formed in Citromyces cultures. FIG. 2, 3: Developmental form of Eberth's bacillus on agar; germinative masses, mycelial filaments emanating from them (cilia), and zymospores they form. -FIG. 4, 5, 6: Citromyces form of Eberth's bacillus cultures.

Pl. 224. - Typhoid fever. FIGS. 1 to 15, gr. 610: Penicilium form of Eberth bacillus cultures (passage through guinea pig. Eberth verified).

Pl. 225. -Typhoid fever. FIG. 1 to 12, gr. 610: Penicilium form of Eberth bacillus cultures (passage through guinea pig. Eberth Lard.).

Pl. 226. FIG. 1 to 16, gr. 610: Penicilium form of organic corn mold, obtained directly by pulp culture of the stalk parenchyma.

Pl. 227. Exanthematic Typhus. FIG. 1 to 11, gr. 610. FIGS. 12, 13, gr. 245. - FIG. 1 to 11: Penicilium form of the pathogenic agent of Exanthematic typhus. - FIG. 12, 13, Sterigmatocystis forms.

Pl. 228. - Exanthematic typhus (continued). - FIG. 1, 2, 3, 4, 7, gr. 100. - FIG. 5, 6, gr. 610. FIG. 8, 9, 12, 13, gr. 1100.- FIG. 1 to 7: Mucor form of the pathogen. Transformation into Penicilium on the filaments of Mucor (FIG. 5, 6, 7). Transformation of Mucor into Monosterigmata form (FIG. 10, 11). - FIG. 8, 9, 12, 13: Bacterial culture of the pathogen.

Pl. 229. -FIG. 1 to 7, gr. 610. FIG. 8, 9, 10, gr. 1100: Penicilium form of the organic mold of oats (FIG. 1 to 7), obtained indirectly (inoculation of Ustilago aveni spores into the guinea pig). Elements of the bacterial culture of the organic mold of oats: FIG. 8: Culture of ground grains in broth; FIG. 9, 10: Culture of pulp of young oat leaves).

Pl. 230. Epidemic dysentery. - FIG. 1 to 15, gr. 610: Penicilium form of cultures of the dysentery bacillus of the Flexner type (FIG. 1 to 8) and of the Shiga type (FIG. 9 to 15).

Pl. 231. FIG. 1 to 15, gr. 610: Penicilium form of the organic mold of Brassica napus, obtained by direct culture of turnip pulp.

Pl. 232. FIG. 1 to 11, gr. 1100. FIG. 1 to 6: Elements of bacterial broth cultures of chicory (Cichorium intybus) one day old (FIG. 1, 2, 3), two days old (FIG. 4), four days old (FIG. 5), ten days old (FIG. 6). - Elements of a bacterial culture of radish (Raphanus sativus, var. radicula) two days old (FIG. 7, 8). - Elements of a bacterial culture of turnip (Brassica napus) two days old (FIG. 10) and four days old (FIG. 9). - Elements of a bacterial culture of cabbage (Brassica oleracea, var. capitata) two days old.

Pl. 233. FIG. 1 to 13, gr. 1100: Elements of bacterial cultures of the organic mold of red beet (Beta vulgaris) inoculated with: beet pulp (FIG. 1, two days. - FIG. 3, six days. FIG. 4, 5, 6, ten days); beet juice (FIG. 2, three days. FIG. 7, 8, twelve days). - Elements of a bacterial culture of chard (Beta vulgaris, var. cicla) of twenty-four hours (FIG. 9, 10) and four days (FIG. 11, elements of the veil). - Elements of a bacterial culture of leek (Aillum porrum) of four days (FIG. 12 and twelve days (FIG. 13).

Pl. 234. - Cholera. FIG. 1 to 7, gr. 610: Penicilium form of cholera vibrio cultures (direct transformation, cholera cult. Pot).

Pl. 235. - Cholera. FIGS. 1 to 4, gr. 245. FIGS. 5 to 8, gr. 610: Penicilium form of cholera vibrio cultures (Bologna vibrio).

Pl. 236. - Cholera. FIG. 1, gr. 245. FIG. 2, gr. 100. FIGS. 3 to 9, 245: Vibrio de Bologne; Mucor form (FIG. 1, 2) - Vibrio de Jaritzin: Penicilium form (FIG. 3, 4); Sterigmatocystis form (FIG. 5); Aspergillus form (FIG. 6 to 9).;

Pl. 237. - Anthrax. FIG. 1, gr. 100. FIG. 2, gr. 245. FIG. 3, 4, 5, gr. 610: Gonidian forms of anthrax bacterial cultures. FIG. 1, 2: Aspergillus form. FIG. 3, 4, 5: Penicilium form.

Pl. 238. - Anthrax. - FIG. 1, gr. 245.-FIG. 2, gr. 610. FIG. 3, gr. 1100. Penicilium form of anthrax bacterial cultures.

Pl. 239. - Anthrax. - FIG. 1, 2, gr. 610. FIG. 3, gr. 1100.- FIG. 1: Germinative masses in a fourteen-hour-old anthrax broth culture. FIGS. 2, 3: Vegetation in broth of the spores of the Aspergillus form of anthrax cultures.

Pl. 240. - Plague. FIG. 1, 7, 8, gr. 245. FIG. 2 to 6, gr. 610: Penicilium form of plague bacterial cultures. - FIGS. 4 to 9: Direct transformation. FIG. 1, 2, 3: Passage through the guinea pig. FIG. 7, 8, 9: Marseille plague.

Pl. 241. - Plague. FIG. 1 to 7, gr. 610. - FIG. 8 to 13, gr. 1100, -FIG. 1 to 7: Penicilium form of a bacterial culture of Marseille plague. FIG. 8 to 12: Elements of bacterial cultures of the rat's organic mold. FIG. 8, 9, 12: Two-day-old culture of rat brain substance in broth. - FIG. 10, 11: Two-day-old culture of rat liver pulp in broth. - FIG. 13: Elements of a culture of Marseille plague on agar, after its passage through the guinea pig's body.

Pl. 242. - Penicilium form of the organic mold of the normal rat (Fig. 1 to 10, gr. 610).

Pl. 243. - Malta fever. FIG. 1 to 10, gr. 610: Penicilium form of bacterial cultures of Micrococcus melitensis. FIG. 11, 12, gr. 1100: Bacterial broth culture of orange organic mold.

Pl. 244. - Penicilium form of orange organic mold (Citrus aurantium) (FIG. 1 to 8, gr. 610).

Pl. 245. - Cerebrospinal meningitis. FIGS. 1 to 4, 6 to 8, gr. 245. FIGS. 5, 9, gr. 610: Penicilium form of meningococcus bacterial cultures.

Pl. 246. - Encephalitis lethargica. - FIGS. 1 to 17, gr. 610: Penicilium form obtained from the cerebrospinal fluid of patients with encephalitis lethargica.

Pl. 247. - Encephalitis lethargica. Gonococcus. - FIG. 1, gr. 245. -FIG. 2 to 8, gr. 610. FIG. 1 to 5: Penicilium form obtained from the cerebrospinal fluid of patients with encephalitis lethargica. FIG. 6, 7, 8: Penicilium form obtained by transformation of a gonococcus bacterial culture.

Pl. 248. - Encephalitis lethargica. - FIG. 1, 2, 3, gr. 245. FIG. 4 to 8, gr. 610: Aspergillus minimus and rudimentary Sterigmatocystis forms obtained from the cerebrospinal fluid of a patient.

Pl. 249. - Encephalitis lethargica. Aspergillus minimus form obtained directly by culture of the cerebrospinal fluid of a patient (FIG. 1, 2, gr. 245. - Fig. 3 to 6, gr. 610).

Pl. 250. Measles.-FIG. 1, 3, 4, 5, 7, gr. 245.-FIG. 6, gr. 100.-FIG. 8, gr. 610.-FIG. 1: Elements of the mold pathogen in the blood of patients. -FIG. 2: Elements of the bacterial culture of the pathogen in broth.-FIG. 3 to 5: Mold evolving into the Penicilium form, obtained by direct culture of blood.-FIG. 6: Elements contained in the veil of a culture of the pathogen.-Fig. 7, 8: Penicilium form of the pathogen in broth.

Pl. 251. Measles. -FIG. 1, 2, 4, 6, gr. 610. FIG. 3, 5, 7, 8, 9, gr. 245: Penicilium form of the measles pathogen. - FIG. 1, 2, 3: Measles No. 5. FIG. 4, 5: Measles No. 9. - FIG. 6 to 9: Measles No. 10.

Pl. 252. Measles. FIG. 1 to 10, gr. 610: Penicilium form of the measles pathogen. FIG. 1 to 5, 7 to 9: Measles No. 3. FIG. 6: Measles No. 10. FIG. 10: Measles No. 5.

Pl. 253. Penicilium form of the organic mold of lettuce (Lactuca sativa, var. capitata) (FIG. 1 to 9, gr. 610).

Pl. 254. Measles. -FIG. 1 to 11, gr. 1100: Elements of bacterial cultures of the measles pathogen. -FIG. 1 to 4: Germinal masses of the pathogen in the blood of patients. -FIG. 5: Seven-day and (FIG. 6) nine-day broth cultures of the pathogen (Measles No. 10). -FIG. 7 to 11: Elements of the veil of a broth culture (Measles No. 3).

Pl. 255. Elements of bacterial cultures of the lettuce mold (Lactuca sativa) (FIG. 1 to 9, gr. 1100). FIG. 1: Form of germ masses in a thirteen-day bacterial broth culture. - FIG. 2: Germ masses and the mycelial filaments they emit in a two-day broth culture. FIG. 3: Germ masses and bacillary elements in a thirteen-day broth culture. FIG. 5, 6: Twenty-four-hour broth culture. -FIG. 4, 6, 8, 9: Two-day broth culture.

Pl. 256. Scarlet fever. FIG. 1 to 5, gr. 245. FIG. 6, gr. 100.- FIG 2,3: Mycelium and fruiting bodies of the pathogenic mold in the patient's blood. -FIG. 5: Germinal masses and ball-shaped fruiting bodies in the venous blood. FIG. 6: Mycelial branch of the venous blood bearing, still adherent, several of its ball-shaped fruiting bodies. - FIG. 1, 3: Mold of a form identical to that of venous blood, developed on a carrot after inoculation with the patient's blood.

Pl. 257. Scarlet fever. FIG. 1, 3, 4, 5, 6, gr. 245. FIG. 2, gr. 610: Gonidian forms of the pathogenic agent. FIG. 1, 2: Verticilium form. FIG. 3: Aspergillus minimus, Sterigmatocystis form. FIG. 4 to 6: Penicilium form.

P1. 258. Scarlet fever. FIGS. 1 to 17, gr. 610: Penicilium form of the scarlet fever pathogen. FIGS. 1, 6, 7, 8, 11, 18: Scarlet fever No. 8. FIGS. 2, 3, 4, 5, 9, 12, 17: Scarlet fever No. 1. FIGS. 6, 7, 8: Scarlet fever No. 3. FIG. 14: Scarlet fever No. 5.

Pl. 259. Penicilium form of the organic mold of carrots (Daucus carota) (FIG. 1 to 15, gr. 610).

Pl. 260. FIGS. 1 to 14, gr. 610: Penicilium form of carrot organic mold. - FIGS. 15, 17, gr. 1100; FIG. 16, gr. 610: Sporothricum form. FIG. 18, gr. 610: Corymbisporium form.

Pl. 261. FIGS. 1 to 9, gr. 1100: Elements of bacterial cultures of the scarlet fever agent. FIGS. 1, 5, six days. FIGS. 2, 7, thirteen days. Elements of bacterial cultures of carrot organic mold. - FIG. 2, two days. FIGS. 6, 8, 9, six days. - FIG. 4, seven days.

Pl. 262. - Chickenpox. FIG. 1, 4, 5, 6, 7, 10, gr. 610. -FIG. 2, 3, 8, 9, gr. 245: Gonidial forms of the chickenpox pathogen. FIG. 1, 6, 7, 8, 9, 10: Different types of the Penicilium form. FIG. 2, 4, 5: Sterigmatocystis form. -FIG. 3: Monostérigmate form.

P1. 263. - Vaccinia. FIGS. 1 to 5, gr. 245. Gonidial mycelium of the vaccine mold. FIGS. 5, 6, gr. 610: For-FIG. 1, 2: Ovularia form. FIGS. 3, 4, 5: Verticilium form (Verticilium alboatrum). - FIG. 6, 7: Penicilium form.

Pl. 264. - Vaccinia. - Penicilium form of the vaccine mold (FIG. 1 to 16, gr. 610).

Pl. 265. - Vaccinia. Penicilium form of the vaccine mold: (FIG. 1 to 10, gr. 610).

Pl. 266. - Vaccinia. -FIG. 1 to 8, gr. 1100: Elements of bacterial cultures in broth of vaccine mold. FIG. 3: Culture of vaccine pulp in broth (twenty-four hours). FIG. 4, 5, 6: Same culture after six days, nine days and thirteen days. -FIG. 1, 2: Same culture (twenty-four hour broth) after its passage through the guinea pig. -FIG. 7, 8: Culture of glycerin vaccine in broth, two days and thirteen days old.

Pl. 267. Smallpox. Gonidian forms of the variola mold obtained directly by culturing smallpox scabs. FIG. 1, 2, gr. 245: Aspergillus form. FIG. 3, gr. 245; FIG. 4, gr. 610: Passalora form. FIG. 5, gr. 610; FIG. 6, gr. 245: Citromyces form. FIG. 7, gr. 245; FIG. 8, gr. 610: Spicaria form.

P1. 268. Smallpox. Gonidial forms of the variola mold obtained indirectly (FIG. 1, 2, 4 to 7, gr. 610). FIG. 3, gr. 245: Peronospora form (Phytophtora infestans).

Pl. 269. Smallpox. - Gonidial forms of the variola mold obtained indirectly. FIG. 1, 2, gr. 245: Aspergillus form. - FIGS. 3 to 8: Penicilium form.

Pl. 270. Smallpox. Penicilium form of the variola mold (FIG. 1 to 11, gr. 610: Smallpox No. 1).

Pl. 271. Smallpox. Penicilium and Monosterigmata forms of the variola mold (smallpox No. 2). FIGS. 1 to 12, gr. 610: Penicilium form. FIGS. 13, 14, 15, gr. 610: Monosterigmata form.

Pl. 272. Penicilium form of the organic mold of potatoes (FIG. 1 to 12, gr. 610).

Pl. 273. Penicilium form of the organic mold of potatoes (FIG. 1 to 16, gr. 610).

Pl. 274. Smallpox. FIGS. 1 to 8, gr. 1100: Elements of bacterial cultures derived from the Aspergillus form of the variola mold in broth (FIG. 1, 2: 24-hour culture. - FIGS. 3, 4, two days. FIGS. 5 to 8, eight days).

Pl. 275. Foot-and-mouth disease. FIGS. 1, 3, 4, gr. 245. - FIGS. 2, 5, 6, gr. 610: Gonidian forms of the pathogenic mold. FIG. 1: Monosterigmata form. FIG. 2: Spicaria verticillata solani form. FIG. 3 to 6: Penicilium form.

P1. 276. Foot-and-mouth disease. FIGS. 1 to 7, gr. 610: Penicilium form of the pathogenic mold. FIGS. 8, 9, 10, gr. 245: Verticilium alboatrum form. FIGS. 11 to 13, gr. 1100: Elements of bacterium broth cultures of the pathogenic mold that causes foot-and-mouth disease (FIG. 11, 12, twenty-four hours. -FIG. 13 ten days). -FIG. 14, gr. 1100: Bacterial elements contained in the serosity of hoof ulcers.

Pl. 277. Foot-and-mouth disease. Penicilium form of the pathogenic mold of foot-and-mouth disease (FIG. 1 to 17, gr. 610).

Pl. 278. Rabies. FIG. 1 to 4, gr. 245. FIG. 5 to 9, gr. 610: Gonidial forms of the rabies pathogen. FIG. 1: Aspergillus form. FIG. 2: Imperfect gonidial form, intermediate between the Mucor type and the Aspergillus type. FIG. 3: Cephalosporium acremonium form. -FIG. 4: Monosterigmata form. -FIG. 5: Corymbisporium form. -FIG. 6 to 9: Penicilium form.

Pl. 279. - Rabies. FIG. 1, gr. 245: Imperfect form related to the mold in Figure 2, Plate 278; chlamydospores. FIG. 2 to 16, gr. 610: Penicilium form of the rabies mold.

Pl. 280. Penicilium form of the organic mold of the dog (FIG. 1 to 15, gr. 610), obtained from the liver (FIG. 1 to 4, 6 to 12, 15), the lung (FIG. 5) and the spleen (FIG. 13, 14).

Pl. 281. Penicilium form of the dog's organ mold (continued), from the lung (FIG. 1, 5), liver (FIG. 2, 3, 6), and spleen (FIG. 4, 7). - Verticilium form obtained by culture of the pulp of the brain substance (FIG. 8, 9, 10).

Pl. 282. Penicilium form of the rabbit's organ mold. FIG. 1 to 16, gr. 610: Culture of spinal cord pulp.

Pl. 283. Syphilis. -FIG. 1, 2, gr. 610. FIG. 3, 4, gr. 245: Monosterigmata form of the pathogenic mold agcut of syphilis (gray mold); FIG. 4, gr. 930 and 6, gr. 610: Monosterigmata form cultivated in colonies immersed in broth; spiral appendages of the mycelium (Treponema pallidum). - FIG. 6 (upper left corner): Bacillary forms of a culture of the Monosterigmata form on carrot.

Pl. 284. - Syphilis. FIG. 1, 2, gr. 1100: Gray-colored monosterigmatized form of syphilis. FIG. 3 to 7: White-colored monosterigmatized form of syphilis: FIG. 3, gr. 245; FIG. 4, 5, 6, 7, gr. 1100; FIG. 7: Spirillary appendages.

Pl. 285. Syphilis. Penicilium form of the agent of syphilis.-FIG. 1, 2, gr. 245; FIG. 3 to 8, gr. 610: Direct transformation of the monosterigmatized form.

P1. 286. Syphilis. FIG. 1, 2, 3, gr. 100: Mucor form (Mucor Corymbifer) of the syphilis agent. FIG. 4 to 7, gr. 245. -FIG. 8, 9, 10, gr. 610: Penicilium form (directly obtained).

Pl. 287. Syphilis. - FIG. 1, gr. 245. FIG. 2, gr. 610: A type of the Penicilium form of the guinea pig organic mold, to be distinguished from the Penicillium form of the syphilis agent. - FIG. 3 to 8, gr. 245. Sterigmatocystis form of the syphilis agent. FIG. 4: Grey Monosterigmata form (indirectly obtained). - FIG. 5, 6, 7: Aspergillus minimus form. - FIG. 8: Aspergillus form.

Pl. 288. - Gonidian forms of the organic mold of the macaque monkey (Macacus cynomolgus). FIGS. 1 to 3, gr. 610: Penicilium form. FIG. 4, gr. 60. - FIG. 5, gr. 91: Mucor cornutus form (origin: lung). FIGS. 6, 7, gr. 91. FIG. 8, gr. 60: Mucor corymbifer form (origin: brain).

Pl. 289 and 289 bis. Penicilium form of the organic mold of the macaque monkey (Pl. 289, FIGS. 1 to 16, gr. 610. - Pl. 289 bis, FIG. 1 to 15, gr. 610.

Pl. 290. Sporothricosis. Micrococcus melitensis. FIG. 1 to 3, gr. 610: Penicilium form of cultures of Micrococcus melitensis. FIG. 4, 6, 7, 8, gr. 610. -FIG. 5, gr. 245: Penicilium form of cultures of Sporothricum Beurmani obtained by direct transformation (FIG. 5, 7, 8) or by passage through guinea pigs (FIG. 4, 6).

Pl. 291. Sporothricosis. FIG. 1, gr. 245. FIG. 2, gr. 610: Penicilium form of Sporothricum Schenki cultures.-FIG. 3, 4, 9, gr. 245; FIG. 5, 6, gr. 610: Penicilium form of Sporothricum Gougeroti cultures (passage through the guinea pig).

Pl. 292. Icterohemorrhagic spirochetosis: Gonidial forms of the pathogen. FIG. 1, 2, 3, gr. 245: Aspergillus form. FIG. 4 to 9, gr. 610: Penicilium form.

Pl. 292 bis. -Penicilium form of the rat's organic mold (FIG. 1 to 9, gr. 610).

Pl. 293. Malaria. Elements of the pathogenic mold in the venous blood at the height of a fever (FIG. 1 to 4, gr. 1100. FIG. 5, gr. 175).

Pl. 294. Malaria. Monosterigmatized gonidial form of the pathogenic agent (FIG. 1, gr. 245. FIG. 2, gr. 610. FIG. 3 to 8, gr. 1100).

Pl. 295. Malaria. Gonidial forms of the pathogen. - FIG. 1, 2, gr. 245: Monilia and Stylosporium forms. FIG. 3, gr. 245: Monosterigmata form in development (spirillary appendages). FIG. 4, gr. 245: Aspergillus form. FIG. 5, 6, 7, gr. 245. FIG. 8, gr. 610: Penicilium form.

Pl. 296. - Sleeping sickness. Trypanosoma gambiense. FIG. 1, 2, gr. 1100.- FIG. 3 to 6, gr. 245. FIG. 1: Formation of trypanosomes by the germinal masses in the guinea pig inoculated with the spores of the Sporothricum form of the pathogen. FIG. 2: Flagellated spores (germinal filament) of the pathogen parasitizing a blood cell. - FIG. 3: Aspergillus form of the pathogen. FIG. 4: Sporothricum form (or Ovularia?) form. - FIG. 5, 6: Sterigmatocystis form.

Pl. 297. - Sleeping sickness. - Penicilium form of the pathogen (FIG. 1 to 7, gr. 610).

Pl. 298. Penicilium form of Lily of the Valley cultures. Lily of the Valley.-FIG. 1 to 16, gr. 610).

Pl. 299.- Trichophyton gypseum asteroides. FIG. 1, gr. 535. FIG. 2, 11, gr. 610. FIG. 3 to 10, gr. 245. FIG. 1: Monosterigmata form - or rudimentary Acremonium alternatum. FIGS. 2 to 11: Penicilium form.

Pl. 300. Trichophyton violaceum, - FIG. 1, gr. 245. - FIG. 2, 3, 4, gr. 610: Penicilium form.

Pl. 301. Trichophyton lacticolor. - FIG. 1 to 7, gr. 610: Pennicilium form.

Pl. 301 bis. Trichophyton crateriforme. - FIG. 1, gr. 175: Peronospora or Botrytis (Peronospora solani). - FIG. 2 to 7, gr. 610: Penicilium form.

Pl. 302. Trichophyton acuminatum. FIG. 1, 2, 4, 6, gr. 245. - FIG. 3, 5, gr. 610: Penicilium form.

Pl. 303. Achorion Schoenleinii. FIG. 1 to 4, gr. 245. -FIG. 5, 6, 7, gr. 610.- FIG. 1, 2: Evolved monosterigmat form. - FIG. 3 to 7: Penicilium form.

Pl. 304. Achorion gypseum. - FIG. 1 to 4, 6, 7, gr. 245; FIG. 5, 8 to 12, gr. 610. - FIG. 1 to 4: Normal fructifications of the Achorion. - FIG. 5 to 9: Evolution of the Achorion to the Penicilium type. - FIG. 10, 11, 12: Perfect Penicilium type.

Pl. 305.- Epidermophyton inguinale. FIG. 1, gr. 610. FIG. 2 to 8, gr. 245. FIG. 1, 2: Normal fructifications of the Epidermophyton. - FIG. 3 to 8: Penicilium form.

Pl. 306. - Brewer's yeast. FIG. 1, 2, 7, gr. 245. FIGS. 3 to 6, gr. 610: Penicilium form.

Pl. 307. Staphylococcus. FIG. 1, 3, 4, gr. 245. FIG. 2, 7, gr. 100. - FIG. 5, gr. 610. FIG. 1, 2: Aspergillus forms, and (FIG. 3 to 5) Penicilium from cultures of Staphylococcus pyogenes aureus. FIG. 6: Aspergillus form of Staphylococcus citrilis. FIG. 7: Aspergillus form of Staphylococcus blanch.

Pl. 308. FIG. 1, 2, gr. 245. FIG. 3, gr. 610: Pyocyanic bacillus. Penicilium form. FIG. 4, 6, gr. 245. FIG. 5, gr. 610: Bacillus subtilis. Penicilium form. FIG. 7, gr. 610. FIG. 8, gr. 245: Micrococcus catarrhalis. Penicilium form. - FIG. 9, gr. 245: Streptococcus. - Advanced monosterigmata form.

Pl. 309. Horse. - Penicilium form. (FIG. 1 to 16, gr. 610). **Origin:** FIGS. 1, 3, 6, 9, 10, 13, 16: liver. - FIG. 2, 4, 8: spleen. - FIG. 5, 7, 11, 12 muscle. FIG. 15: lung.

Pl. 310. Pig. - Penicilium form (FIG. 1 to 18, gr. 610). Origin: FIGS. 1 to 8, FIG. 12: liver. FIGS. 9 to 11, 13 to 18: lung.

Pl. 311. Sheep. Penicilium form (FIG. 1 to 14, gr. 610). - Origin: lung. Rhizopus form (FIG. 15, gr. 100).

Pl. 312. Guinea pig. Penicilium form (FIG. 1 to 13, gr. 610). Origin: FIG. 1, 2, 6, 8, 12, 13: liver. - FIG. 3, 4, 5, 7, 10, 11: spleen. - FIG. 9: lung.

Pl. 313. Guinea pig. Penicilium form (FIG. 1 to 11, gr. 610). Origin: FIG. 1, 7, 8: lung; FIG. 2 to 6, 9 to 11: spleen.

Pl. 314. Guinea pig. Citromyces form (FIG. 1, 2, gr. 245, FIG. 3, gr. 610). Origin: lung. Penicilium form (FIG. 4 to 11, gr. 610). Origin: lymph nodes.

Pl. 315. - Mouse. - Penicilium form (FIG. 1 to 15, gr. 610). FIGS. 7, 10 to 12: liver. Origin: FIGS. 1 to 6, 8, 9, 13, 14, 15: heart. Sporothricum form (FIG. 16, gr. 610). Origin: brain.

Pl. 316. - Peacock (Pavo cristatus). - Penicilium form (FIG. 1 to 19, gr. 610). Origin: lung.

Pl. 317. - Sultana fowl (Porphyrio Edwardsii). Penicilium form (FIG. 1 to 14, gr. 610). Origin: spleen. - Aspergillus form (Fig. 15, gr. 100). Origin: lung.

Pl. 318. Grey parrot (Psittacus cinnah). - Penicilium Form (FIG. 1 to 10, gr. 610). Origin: lung. - Aspergillus minimus Form (FIG. 11 to 13, gr. 245). Origin: heart.

Pl. 319. - Turtle (Testudo ibera). Penicilium Form (FIG. 1 to 11, gr. 610).

Pl. 320. Sayman (Alligator mississipiensis). - FIG. 1, gr. 100. FIG. 2, gr. 245. FIG. 3, gr. 610: Verticilium Form. FIG. 4, 5, 6, gr. 245: Aspergillus Form. FIG. 7 to 11, gr. 610: Penicilium Form.

Pl. 321. Frog (Rana temporaria). — FIGS. 2 to 14, gr. 610: Penicilium form. FIG. 1: Form from the agar culture. - FIGS. 15, 16, gr. 245: Mucor form.

Pl. 322. - Eel. (Anguilla anguilla). - FIGS. 1 to 11, gr. 610: Penicilium form.

Pl. 323. Whiting (Merlangus merlangus) - FIGS. 1 to 7, gr. 610: Penicilium form. FIG. 8, gr. 245: Fusarium form. FIG. 9, gr 245: Aspergillus form. - FIG. 10, gr. 245. FIG. 11, gr. 1100: Mold obtained from muscle tissue; fasciculated arrangement of very long mycelial branches.

Pl. 324. - Black salsify. - Scorzonera hispanica. Penicilium form (FIG. 1 to 15, gr. 610).

Pl. 325. Eucalyptus globulus. FIG. 1 to 11, gr. 610: Penicilium form. Origin: Floral receptacle.

Pl. 326. Amanita phalloides. FIG. 1 to 15, gr. 610: Penicilium form. FIG. 16, gr. 245: Fusophragmium form.

Pl. 327. Amanita citrina. - FIGS. 1 to 11, gr. 610: Penicilium form.

Pl. 328. Collybia velutipes. - FIGS. 1 to 12, gr. 610: Penicilium form.

Pl. 329. Lycoperdon pratense. FIGS. 1 to 15, gr. 610: Penicilium form. - FIG. 16, gr. 245: Monosterigmata form.

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All the plates follow in a VOLUME II